

# Notice of Allowability

Application No.

10/046,730

Examiner

Shafiqul Haq

Applicant(s)

EDWARDS ET AL.

Art Unit

1641

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments and arguments filed 11/09/07.
2. ☒ The allowed claim(s) is/are 25-26,28-31 and 69-71, now renumbered as 1-9.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 12/3/07.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

***Examiner's amendment***

1. Authorization for this examiner's amendment was given in a telephone interview with Christopher W. Raimund Chao on December 03, 2007.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
3. Claim 25 has been amended as follows:

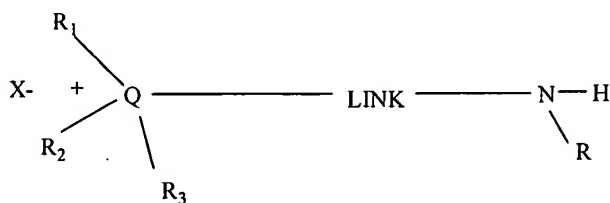
Replace claim 25 with the following:

-- A method of modifying the surface of a solid support to enhance the quantum yield of chemiluminescent emissions, the method comprising:

reacting a functional group on a chemiluminescent enhancing compound with functional groups on the surface of the solid support to covalently attach the chemiluminescent enhancing compound to the surface of the solid support ; and

attaching a plurality of immobilized probes for a biopolymer target to the surface of the solid support ,

wherein the chemiluminescent enhancing compound has the general formula:



wherein Q is N or P ; LINK is a divalent linker moiety; R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are, independently, an alkyl group, an aryl group or a nitrogen heterocycle; R is hydrogen, an alkyl group, or an aryl group; and X<sup>-</sup> is a counterion; and wherein the step of covalently attaching the chemiluminescent enhancing compound to the surface of the solid support comprises reacting the amino group on the quaternary onium compound with the functional groups on the surface of the solid support.

4. Claim 28 has been amended as follows:

In claim 28, line 3, replace the word "forming" with the word --activating--.

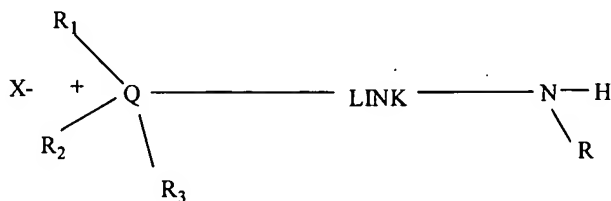
5. Claim 31 has been amended as follows:

Replace claim 31 with the following:

--The method of Claim 25, wherein the chemiluminescent enhancing compound comprises a functional group linked to an onium moiety, the method further comprising activating the functional group and reacting with a functional group on a probe for a biopolymer target to covalently attach the probe to the chemiluminescent enhancing compound.--

6. Claim 69 has been amended as follows:

In claim 69, line 7, replace the formula with:




In claim 69, line 8, replace the word "[LINK]" with --LINK--.

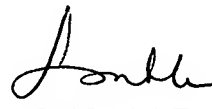
**Conclusion**

7. Claims 25-26, 28-31 and 69-71, now renumbered as 1-9 are allowed.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shafiqul Haq whose telephone number is 571-272-6103. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SHAFIQUL HAQ  
EXAMINER  
ART UNIT 1641

  
LONG V. LE  
12/10/07  
SUPERVISORY PATENT EXAMINER  
ART UNIT 1641